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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/985,999	11/07/2001	Koji Amano	111056	4578
25944	7590	07/28/2004	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			NGUYEN, ANH T	
			ART UNIT	PAPER NUMBER
			2174	
DATE MAILED: 07/28/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/985,999	Applicant(s) AMANO, KOJI	
	Examiner Anh T Nguyen	Art Unit 2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/7/2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. By merely describing a process, the claims fail to meet the standard format of claiming convention which should include matters such as a method with steps, an apparatus or an article of manufacture. The examiner will interpret claims 1-49 in light of the specification. However, appropriate corrections are required.

3. Claims 1-49 are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document.

For the purpose of applying prior art, the examiner will make the best effort in interpreting claims 1-49 in light of the specification.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1, 4, 6-10, and 13, are rejected under 35 U.S.C. 102(b) as being anticipated by Barrett et al. ("Barrett", US 5,880,727).

As per claim 1, Barrett discloses a display device for displaying options, wherein there is a case in which all of the options are displayed (FIG.6) and a case in which some of the options are displayed (FIG.5), and the display device is controlled so that at least one of the options to be displayed in both of the cases is displayed in a position which is different in the case in which all of the options are displayed than in the case in which some of the options are displayed (FIGS. 5 & 6, *the "100%" option button and the "AUTO" option button are displayed in a position which is different in both cases*).

As per claim 4, Barrett discloses a display device for displaying options, wherein there is a case in which all of the options are displayed (FIG.6) and a case in which some of the options are displayed (FIG.5), and the display device is controlled so that the options are displayed with a larger interval between the options when some of the options are displayed than when all of the options are displayed (there is more space on the display screen when some of the options are displayed (FIG.5) than when all of the options are displayed (FIG.6)).

As per claim 6, Barrett teaches the display device wherein the options include options associated with a duplex image forming function (FIG.4, *2 SIDED options: 1 → 1 Sided, 1 → 2 Sided, 2 → 2 Sided, 2 → 1 Sided*).

As per claim 7, Barrett teaches the display device wherein whether all of the options are displayed or some of the options are displayed is determined according to mounting conditions of additional devices (col.2, lines 41-58, *controller 15 controls all functions within multi-function device so as to coordinate all interactions between the various modules and devices that may include: a sorter, stapler, feeder, etc.*).

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As per claim 8, Barrett teaches the display device wherein the display device is used for selection of functions of an image forming apparatus (col.2, lines 20-27, *user interface 5 allows user to select the various functions of the image forming apparatus*).

As per claim 9, Barrett teaches the display device wherein the display device is a touch panel type display device which allows a user to select a function by touching a displayed area of one of the options (col.5, lines 29-30, *user interface is a touch-sensitive video display device*).

As per claim 10, Barrett teaches the display device further comprising display control means for displaying the options in a uniform arrangement when the number of the options to be displayed is changed (FIG. 2, col.2, lines 44-47, controller 15; FIGS. 5 & 6, *options are displayed uniformly such as in the case of "100%" option, "AUTO" option, and "X:78%" "Y:100%" option*).

As per claim 13, Barret teaches the display device wherein the options include options associated with a particular function, and the options associated with the particular function are displayed when the particular function is selected on a predetermined display screen (col.5, lines 48-51, *activatable area is associated with a certain value, function, or linked screen*).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claim 2, 5, and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett et al. ("Barrett", US 5,880,727) in view of Kino et al. ("Kino", US 6,469,719).

As per claim 2, Barrett discloses a display device for displaying options, wherein there is a case in which all of the options are displayed and a case in which some of the options are displayed (FIGS. 5 & 6, *the "100%" option button and the "AUTO" option button are displayed in a position which is different in both cases*). Barrett does not specifically disclose wherein the display device is controlled so that at least one of the options to be displayed in both of the cases is displayed in a size which is different in the case in which all of the options are displayed than in the case in which some of the options are displayed. Kino teaches a display device with improved layout of options wherein the display size of at least one of the options are adjusted or reduced (FIG.1, col.2, lines 46-65, *layout unit, size reducing unit*). It would have been obvious to an artisan at the time of the invention to combine the teachings of Kino with the display device of Barrett in order to accommodate the fluctuation in the number of menu items without requiring the definition of a plurality of GUI screens with different layouts of menu options (col.2, lines 25- 32).

As per claim 5, Barrett discloses a display device for displaying options, wherein there is a case in which all of the options are displayed and a case in which some of the options are displayed (FIGS. 5 & 6, *the "100%" option button and the "AUTO" option button are displayed in a position which is different in both cases*). Barrett does not specifically disclose wherein the display device is controlled so that the options are displayed in a larger size when some of the options are displayed than when all of the options are displayed. Kino teaches a display device with improved layout of options wherein the display size of at least one of the options are

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adjusted or reduced (FIG.1, col.2, lines 46-65, *layout unit, size reducing unit*). It would have been obvious to an artisan at the time of the invention to combine the teachings of Kino with the display device of Barrett in order to display options large enough for the user to discern without making them overly difficult to read (col.3, lines 5- 23).

As per claim 11, Barrett discloses the display device substantially as claimed. Barrett does not specifically disclose the display device further comprising display control means which selects one of display data which are stored in advance and uses the selected display data to display the options when the number of the options to be displayed is changed. Kino teaches the display device further comprising display control means which selects one of display data which are stored in advance and uses the selected display data to display the options when the number of the options to be displayed is changed (FIG.1, GUI Control Unit, Menu Control Unit, Menu Display Attribute Storage Unit, Layout Information Storage Unit, col.2, line 46-56, *display form and display position of each menu option stored in storing unit can be adjusted, so that more options can be displayed on the GUI screen*). It would have been obvious to an artisan at the time of the invention to combine the teachings of Kino with the display device of Barrett in order to dynamically arrange the options even if the display positions of options are not determined in advance and thus reducing the time taken to design and develop the GUI screens (col.2, lines 52-56).

As per claim 12, Barrett discloses the display device substantially as claimed. Barrett does not specifically disclose the display device further comprising calculating means for determining by calculation display positions of the options when the number of the options to be displayed is changed. Kino teaches the display device comprising calculating means for

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determining by calculation display positions of the options when the number of the options to be displayed is changed (col.2, lines 57-67, *layout determining unit includes a display position determining unit for determining the display position of each option so that the options do not overlap one another*). It would have been obvious to an artisan at the time of the invention to combine the teachings of Kino with the display device of Barrett so the greatest possible numbers of options are simultaneously and favorably displayed with respect to the sizes and the total number of options(col.3, lines 1-9) .

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett et al. ("Barrett", US 5,880,727) in view of Hocker et al. ("Hocker", US 5,754,179).

As per claim 3, Barrett discloses a display device for displaying options, wherein there is a case in which all of the options are displayed and a case in which some of the options are displayed (FIGS. 5 & 6, *the "100%" option button and the "AUTO" option button are displayed in a position which is different in both cases*). Barrett does not specifically disclose wherein the display device is controlled so that at least one of the options to be displayed in both of the cases is displayed in a shape which is different in the case in which all of the options are displayed than in the case in which some of the options are displayed. Hocker teaches a method for organizing, displaying, managing, and selecting options on a graphical user interface in which the options are distinguished by one of a plurality of distinguishing features such as size and shape (col.1, lines 58-60; col.4, lines 36-48, *distinguishing features include: size, shape*). It would have been obvious to an artisan at the time of the invention to combine the teachings of Hocker with the display device of Barrett to provide users with a dynamic way of defining the

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relationship among the many different options on a graphical user interface by selecting different shapes to represent different functions (col.1, line 63-col.2 line 16).

9. Claims 14-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett et al. ("Barrett", US 5,880,727) in view of Kino et al. ("Kino", US 6,469,719) and further in view of Hocker et al. ("Hocker", US 5,754,179).

As per claim 14, Barrett discloses a display method for displaying options, wherein there is a case in which all of the options are displayed (FIG.6) and a case in which some of the options are displayed (FIG.5), and at least one of the options to be displayed in both of the cases is displayed in a position which is different in the case in which all of the options are displayed than in the case in which some of the options are displayed (FIGS. 5 & 6, *the "100%" option button and the "AUTO" option button are displayed in a position which is different in both cases*). Barrett does not specifically disclose at least one of the options to be displayed in both of the cases is displayed, in a size or in a shape which is different in the case in which all of the options are displayed than in the case in which some of the options are displayed. Kino teaches a display device with improved layout of options wherein the display size of at least one of the options are adjusted or reduced (FIG.1, col.2, lines 46-65, *layout unit, size reducing unit*). It would have been obvious to an artisan at the time of the invention to combine the teachings of Kino with the display device of Barrett in order to accommodate the fluctuation in the number of menu items without requiring the definition of a plurality of GUI screens with different layouts of menu options (col.2, lines 25- 32).

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Hocker teaches a method for organizing, displaying, managing, and selecting options on a graphical user interface in which the options are distinguished by one of a plurality of distinguishing features such as size and shape (col.1, lines 58-60; col.4, lines 36-48, *distinguishing features include: size, shape*). It would have been obvious to an artisan at the time of the invention to combine the teachings of Hocker with the display device of Barrett to provide users with a dynamic way of defining the relationship among the many different options on a graphical user interface by selecting different shapes to represent different functions (col.1, line 63-col.2 line 16).

Claim 15 and 19 are individually similar in scope to claim 6 and therefore are rejected under similar rationale.

Claim 16 and 20 are individually similar in scope to claim 7 and therefore are rejected under similar rationale.

Claim 17 is similar in scope to claim 10 and therefore is rejected under similar rationale.

Claim 18 is similar in scope to claim 14 and therefore is rejected under similar rationale.

Claims 21-24 are individually similar in scope to claim 7 and therefore are rejected under similar rationale.

Claims 25-28 are individually similar in scope to claim 8 and therefore are rejected under similar rationale.

Claims 29-32 are individually similar in scope to claim 9 and therefore are rejected under similar rationale.

Claims 33-36 are individually similar in scope to claim 10 and therefore are rejected under similar rationale.

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Claims 37-40 are individually similar in scope to claim 11 and therefore are rejected under similar rationale.

Claims 41-45 are individually similar in scope to claim 12 and therefore are rejected under similar rationale.

Claims 46-49 are individually similar in scope to claim 13 and therefore are rejected under similar rationale.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Barrett et al. (US 5,880,727) teaches reprographic system for arranging presets locations in a multi-level user interface

Kino et al. (US 6,469,719) teaches graphical user interface apparatus with improved layout of menu items

Hocker et al. (US 5,754,179) teaches selections facilitation on a graphical interface

Cok (US 5,548,692) teaches method for layout of arbitrarily sized and shaped icons in a display

Yamamoto (US 6,618,061) teaches input display device and method for switching the processing functions displayed in a plurality of display areas

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Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh Nguyen whose telephone number is (703) 305-8649.


The examiner can normally be reached on Monday - Thursday from 6:00 am to 3:30 pm (EST) and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid, can be reached on (703) 308-0640.

The fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Anh T Nguyen
Examiner
Art Unit 2174


SY D. LUU
PRIMARY EXAMINER